

IN THE CLAIMS

1. (Cancelled)
2. (Currently Amended) The method of ~~claim 1~~ claim 9, further comprising correcting and/or optimizing the mask ~~and/or the simulation of image thereof~~.
3. (Original) The method of claim 2 wherein said correcting and/or optimizing comprises increasing or decreasing at least one magnitude or value of (a) an optical proximity correction factor and/or (b) a serif.
- 4-6. (Cancelled)
7. (Currently Amended) The method of ~~claim 6~~ claim 15, wherein correcting corner rounding effects comprises applying distortions are applied to corners and serifs in the mask.
8. (Cancelled)
9. (Currently Amended) A method for producing a mask for fabrication of an integrated circuit, comprising:
 - simulating a mask from a first drawn layout, to produce a simulated mask;
 - comparing the simulated mask and the first drawn layout;
 - correcting the first drawn layout, to produce a second drawn layout; and
 - producing a mask from the second drawn layout;

wherein the simulating comprises simulating proximity effects and resolution due to pixel spot size.
10. (Previously Presented) The method of claim 9, wherein the proximity effects comprise effects of light having a wavelength of approximately four times a feature size of said drawn layout.
11. (Previously Presented) The method of claim 9, further comprising simulating a photoresist pattern from the simulated mask, prior to correcting the first drawn layout.

12. (Previously Presented) A method of producing a semiconductor structure, comprising:

- producing a mask by the method of claim 9; and
- producing a semiconductor structure from the mask.

13. (Previously Presented) A method of producing an integrated circuit, comprising:

- producing a semiconductor structure by the method of claim 12; and
- producing a integrated circuit from the semiconductor structure.

14. (New) The method of claim 11, further comprising correcting and/or optimizing the simulation of the photoresist pattern.

15. (New) The method of claim 9, further comprising correcting corner rounding effects in an image produced by the mask.

16. (New) The method of claim 14, wherein said correcting and/or optimizing comprises increasing or decreasing at least one magnitude or value of (a) an optical proximity correction factor and/or (b) a serif.